

# Comparisons of Job Characteristics

**Focus Occupation:** [Computer Software Engineers, Applications \(15-1031\)](#)

**Associated Occupation:** [Computer Specialists, All Other \(15-1099\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 91

**Focus Occupation:** Computer Software Engineers, Applications (15-1031)

**Associated Occupation:** Computer Specialists, All Other (15-1099)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Computers and Electronics	8.4	19.7	23.8	>> Current knowledge level is likely more than sufficient
Engineering and Technology	5.7	11.5	10.1	< Expanded education and/or training may be required
Design	5.2	11.1	6.6	<< Extensive education and/or training may be required
Telecommunications	3.9	9.0	4.2	<< Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 71

**Focus Occupation:** Computer Software Engineers, Applications (15-1031)

**Associated Occupation:** Computer Specialists, All Other (15-1099)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Operations Analysis	5.0	12.0	11.4	0 Current skill level may be sufficient
Systems Evaluation	6.4	11.1	13.4	> Skill level is likely sufficient
Systems Analysis	6.5	10.6	13.3	> Skill level is likely sufficient
Programming	2.2	10.0	14.6	>> Skill level is likely more than sufficient
Technology Design	2.6	6.6	10.3	>> Skill level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 96

Focus Occupation: Computer Software Engineers, Applications (15-1031)

Associated Occupation: Computer Specialists, All Other (15-1099)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Deductive Reasoning	10.6	12.8	13.6	0	Current ability level may be sufficient
Written Expression	9.8	12.7	10.0	<	Some improvement in abilities may be required
Information Ordering	9.9	11.7	11.6	0	Current ability level may be sufficient
Category Flexibility	9.0	10.4	11.1	0	Current ability level may be sufficient
Fluency of Ideas	7.6	10.1	11.9	>	Current ability level is likely sufficient
Originality	7.6	9.8	10.8	>	Current ability level is likely sufficient
Speed of Closure	5.9	7.2	8.1	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

There are no common work activities.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 92

Focus Occupation: Computer Software Engineers, Applications (15-1031)

Associated Occupation: Computer Specialists, All Other (15-1099)

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Computers	1
Content authoring and editing software	1
Content management software	6
Data management and query software	1
Development software	4
Electronic and communication measuring and testing instruments	14
Industry specific software	1
Network applications software	1
Networking software	21
Operating environment software	12
Security and protection software	30
Utility and device driver software	17

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.